



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,993	11/26/2003	Jay Wu Hong	CISCO-7235	9213
21921	7590	06/27/2007	EXAMINER	
DOV ROSENFELD 5507 COLLEGE AVE SUITE 2 OAKLAND, CA 94618			CEHIC, KENAN	
			ART UNIT	PAPER NUMBER
			2609	
			MAIL DATE	DELIVERY MODE
			06/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/722,993	HONG, JAY WU	
	Examiner Kenan Cenic	Art Unit 2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 November 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,5-38,40-56 is/are rejected.
- 7) Claim(s) 4 and 39 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02/20/2004.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the terms “Disclosed herein” is improper language. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claim 3,4, 7, 12, 15, 16, 22, 25, 32, 33, 37-44, 45-48, 50-56 are objected to because of the following informalities:

For claim 3, the claim limitation “the output RF power level” in line 3 is the first occurrence. It is suggested to the applicant to replace this term with - - an output RF power level --. Similar problems exist in claim 22, line 3, claim 38 line 3.

For claim 4, the terms “ a discovery message” in line 3, seem to refer back to “ the discovery message “ in claim 2 line 3. If this is true, it is suggested to the applicant to change those terms to - - the discovery message --.

For claim 4, the terms “ a configuration request message” in line 4, seem to refer back to “ the configuration request message” in claim 2 line 4. If this is true, it is suggested to the applicant to change those terms to - - the configuration request message --.

Art Unit: 2609.

For claim 7, the terms “the network” in line 1, seem to refer back to “a wireless network” in claim 1 line 1. If this is true, it is suggested to the applicant to change those terms to - - the wireless network --. Similar problems exist in claim 16 line 2, claim 25 line 2, claim 33 line 2, claim 41 line 2, claim 54 line 2.

For claim 12, the terms “the second station” in line 4, seem to refer back to “a second wireless station” in claim 11 line 3. If this is true, it is suggested to the applicant to change those terms to - - the second wireless station --.

For claim 15, the terms “a configuration request message ” in line 2, seem to refer back to “a configuration request message” in claim 12 line 3. If this is true, it is suggested to the applicant to change those terms to - - the configuration request message --. Similar problems exist in claim 23 line 9, claim 32 line 2

For claim 37, the terms “An apparatus ” in line 1, seem to refer back to “An apparatus” in claim 36 line 1. If this is true, it is suggested to the applicant to change those terms to - - The apparatus --. Similar problems exist in claims 38-43 line 1.

For claim 39, the terms “a discovery message ” in line 3, seem to refer back to “a discovery message” in claim 37 line 3. If this is true, it is suggested to the applicant to change those terms to - - the discovery message --.

Art Unit: 2609

For claim 44, the terms "the transceiver" in line 5, seem to refer back to "a wireless transceiver" in claim 40 line 3. If this is true, it is suggested to the applicant to change those terms to -- the wireless transceiver--. Similar problems exist in claim 44 line 12.

For claim 45, the terms "An apparatus" in line 1, seem to refer back to "An apparatus" in claim 44 line 1. If this is true, it is suggested to the applicant to change those terms to -- The apparatus --. Similar problems exist in claims 45-48 line 1.

For claim 50, the terms "An apparatus" in line 1, seem to refer back to "An apparatus" in claim 49 line 1. If this is true, it is suggested to the applicant to change those terms to -- The apparatus --. Similar problems exist in claims 51-56 line 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 20-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For claims 20-35, the claim limitation “a carrier medium” in line 1, is not a process, machine, manufacture, or composition of matter, or any new and useful improvement thereof because there is no physical structure/connection of medium recited in the claims. To overcome this rejection, it is suggested to change “carrier medium” to -- computer readable medium encoded with computer executable instructions --.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1, 6, 7, 11,12, 14, 16, 20, 24, 25, 28, 29, 31, 33, 36, 40,41, 49, 50,52, 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Havarinen et al (US 2002/0012433 A1).

For claim 1, Havarinen et al discloses a method in a first wireless station (see Figure 1, reference sign MIP interconnected with GAGW and HAAA, and section 0172 lines 1-5) of a wireless network (see section 0172 and section 0163 lines 3-5), the method comprising:

wirelessly receiving a configuration request message (see Figure 2, MT sends registration request to the PAC, which is part of the MIP) from a second wireless station; (see Figure 1, reference character MT and section 0171 lines 4-6) and

generating a configuration data message (see Figure 2, section 0180 and 181) for the second wireless station (see section 0182) including one or more configuration parameters (see sections 0180-0182) for the second wireless station (see section 0182), and wirelessly transmitting (see Section 0171 line 4-6) the configuration data message to the second wireless station (see section 0182), such that the second wireless station can be configured (see section 0187).

For claim 6 and 40, Havarinen et al discloses , wherein the generating includes generating random numbers (see section 0189 lines 4-8), and wherein configuration parameters includes a security key (see section 0198 lines 14-17).

For claim 7 and 41, Havarinen et al. discloses, wherein the first wireless station is an access point (AP) (see section 0172) of the network (see Figure 1), and the second wireless station is to be a client station of the AP (see section 0368).

For claim 11, Havarinen et al. discloses a method in a first wireless station (see Figure 1, reference character MT and section 0171 lines 4-6) of a wireless network (see Figure 1 and section 0163 lines 3-5), the method comprising:
wirelessly receiving a configuration data message (see section 0190 lines 1-2 and 0182) from a second wireless station (see Figure 1, reference sign MIP interconnected with GAGW and HAAA interconnected with GAGW and HAAA, and section 0172 lines 1-5); extracting one or more configuration parameters (see section 0183) from the

configuration data message (see section 0190 lines 1-2 and 0182); and applying the one or more configuration parameters to the first wireless station (see section 0187, MT is configured to share a common K), to configure the first wireless station (see section 0193 line 5-6, MT is updated) such that the first wireless station can be automatically configured (see section 0263 lines 10-13).

For claim 12 and 50, Havarinen et al. disclose, wherein the method further comprises: wirelessly transmitting a configuration request message (see Figure 2, MT sends registration request to the PAC, which is part of the MIP, see section 0189 lines 1-11), such that the configuration data message (see section 0190 lines 1-2 and 0182) is transmitted see section 0190 lines 1-2 and 0182) by the second station (see Figure 1, reference sign MIP interconnected with GAGW and HAAA interconnected with GAGW and HAAA, and section 0172 lines 1-5) in response to the second station receiving the configuration request message (see Figure 2, “Registration Reply with a New Session Key” and section 0189 lines 8-11).

For claim 14 and 52, Havarinen et al. disclose, wherein the first wireless station (see section 0244 lines 6-9) is configured only if a user selects the first wireless station to be configurable (see section 0244 lines 6, accessing the network entails performing the configuration procedure as taught by Havarinen et al).

For claim 16 and 54, Havarinen et al. disclose, wherein the second wireless station is an access point (AP) (see section 0172) of the network (see Figure 1), and the first wireless station is a client station of the AP (see section 0368).

For claim 20, Havarinen et al disclose carrier medium (see sections 0134-139), comprising one or more computer readable code segments to instruct a processor to implement (see sections 0116-0123) a method in a first wireless station (see Figure 1, reference sign MIP interconnected with GAGW and HAAA interconnected with GAGW and HAAA, and section 0172 lines 1-5) of a wireless network (see section 0172 and section 0163 lines 3-5), the method comprising:
wirelessly receiving a configuration request message (see Figure 2, MT sends registration request to the PAC, which is part of the MIP) from a second wireless station (see Figure 1, reference character MT and section 0171 lines 4-6); and
generating a configuration data message (see Figure 2, section 0180 and 181) for the second wireless station (see section 0182) including one or more configuration parameters (see sections 0180-0182) for the second-wireless station (see section 0182), and wirelessly transmitting (see Section 0171 line 4-6) the configuration data message to the second wireless station (see section 0182),
such that the second wireless station can be configured (see section 0187).

For claim 24, Havarinen et al discloses a carrier medium (see sections 0134-139), wherein the generating includes generating random numbers (see section 0189 lines 4-8),

Art Unit: 2609

and wherein configuration parameters includes a security key (see section 0198 lines 14-17).

For claim 25, Havarinen et al. discloses a carrier medium (see sections 0134-139), wherein the first wireless station is an access point (AP) (see section 0172) of the network (see Figure 1), and the second wireless station is to be a client station of the AP (see section 0368).

For claim 28, Havarinen et al. carrier medium comprising one or more computer readable code segments to instruct a processor to implement (see sections 0116-0123) a method in a first wireless station (see Figure 1, reference sign MIP interconnected with GAGW and HAAA interconnected with GAGW and HAAA, and section 0172 lines 1-5) of a wireless network (see section 0172 and section 0163 lines 3-5), the method comprising:
wirelessly receiving a configuration data message (see section 0190 lines 1-2 and 0182) from a second wireless station (see Figure 1, reference sign MIP interconnected with GAGW and HAAA interconnected with GAGW and HAAA, and section 0172 lines 1-5);
extracting one or more configuration parameters (see section 0183) from the configuration data message (see section 0190 lines 1-2 and 0182); and
applying the one or more configuration parameters to the first wireless station (see section 0187, MT is configured to share a common K), to configure the first wireless station (see section 0193 line 5-6, MT is updated)

such that the first wireless station can be automatically configured (see section 0263 lines 10-13).

For claim 29, Havarinen et al. disclose a carrier medium (see sections 0116-0123), wherein the method further comprises:

wirelessly transmitting a configuration request message (see Figure 2, MT sends registration request to the PAC, which is part of the MIP, see section 0189 lines 1-11), such that the configuration data message (see section 0190 lines 1-2 and 0182) is transmitted see section 0190 lines 1-2 and 0182) by the second station (see Figure 1, reference sign MIP interconnected with GAGW and HAAA interconnected with GAGW and HAAA, and section 0172 lines 1-5) ins response to the second station receiving the configuration request message (see Figure 2, “Registration Reply with a New Session Key” and section 0189 lines 8-11).

For claim 31, Havarinen et al. disclose a carrier medium (see sections 0116-0123), wherein the first wireless station (see section 0244 lines 6-9) is configured only if a user selects the first wireless station to be configurable (see section 0244 lines 6, accessing the network entails performing the configuration procedure as taught by Havarinen et al).

For claim 33, Havarinen et al. disclose a carrier medium (see sections 0116-0123), wherein the second wireless station is an access point (AP) (see section 0172) of the

network (see Figure 1), and the first wireless station is a client station of the AP (see section 0368).

For claim 36, Havarinen et al. disclose an apparatus in first a station (see Figure 1, reference sign MIP interconnected with GAGW and HAAA interconnected with GAGW and HAAA, and section 0172 lines 1-5) of a wireless network (see section 0172), the apparatus comprising:

means for wirelessly receiving (see section 0172 for wireless, see section 0178 lines 1-4, FAA, which is part of the MIP, is able to receive from MT) ;

means for wirelessly transmitting (see section 0172 for wireless; see section 0182, FAAA, which is part of the MIP, send data) and

means for responding (see Figure 2, MIP is responding with a registration reply, also see section 0180 and 181) to wirelessly receiving (see section 0097 line 1-2, MT is able to receive) a configuration request message from a second wireless station (see Figure 2, MT sends registration request to the PAC, which is part of the MIP), the responding including generating a configuration data message (see Figure 2, section 0180 and 0181,

MIP, GAGW and HAAA create a message with certain parameters) for the second wireless station (see section 0182, sends the reply to the MT) including one or more configuration parameters (see sections 0180-0182) for the second wireless station (see section 0182), and wirelessly transmitting (see Section 0172) the configuration data message to the second wireless station (see section 0182), such that the second wireless

station can be configured (see section 0187, both the MT and FAAA are configured to share a common K).

For claim 49, Havarinen et al discloses an apparatus in a first wireless station (see Figure 1, reference character MT and section 0171 lines 4-6) of a wireless network (see section 0172), the apparatus comprising:

means for wirelessly receiving (see section 0097 line 1-2, MT is able to receive);
means for wirelessly transmitting (see section 0237, MT is able to transmit); and
means for responding to wirelessly receiving (see section 0097 line 1-2, MT is able to receive) a configuration data message from a second wireless station (see Figure 2, the MT receives the Registration Reply, then it sends a Registration Request with an SRES extension), the responding to wirelessly receiving a configuration data message including extracting one or more configuration parameters from the configuration data message (see section 0183-0184, the MT uses the RAND and SIGNrand sent to it by the FAAA, which is part of the MIP; after that the MP responds by sending SIGNres back to the FAAA), and applying the one or more configuration parameters to the first wireless station (see section 0183, MT applies data sent by the FAAA to calculate a value (K)), such that the first wireless station can be configured (see section 0187, calculated K value is used to configure the station).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 2, 3, 5, 13, 21, 22, 30, 37, 38, 44, 47, 48, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havarinen et al (US 2002/0012433 A1), in view of Tada et al (US 7,184,707 B2).

Note: In claim 3, 22 the claim limitation contained in lines 5-6 is not a positively recited claim limitation (see “such that” in line 5), as it does not limit the claim to a particular structure. It presents an insignificant result and it is suggested to the applicant to delete those terms.

For claims 2,3,5,13, 21,22, 30, 37, 38, 44, 47, 48, 51 Havarinen et al discloses all of the claimed invention, as described in paragraph 6.

Additionally, Havarinen et al discloses the following for the following claims:

For claim 2 and 37, Havarinen et al teaches a method, wherein the method further comprises:

the configuration request message wirelessly (see section 0171 line 4-6) received at the first station is wirelessly transmitted by the second wireless station (see Figure 2, MT sends registration request to the PAC, which is part of the MIP, also see section 0189 lines 1-11)

For claim 13, Havarinen et al discloses a method as, further comprising: that the wirelessly transmitting of the configuration request message (see Figure 2, MT sends registration request to the PAC, which is part of the MIP, see section 0189 lines 1-11)

For claim 21, Havarinen et al teaches a carrier medium (see sections 0134-139), wherein the method further comprises:

the configuration request message wirelessly (see section 0171 line 4-6) received at the first station is wirelessly transmitted by the second wireless station (see Figure 2, MT sends registration request to the PAC, which is part of the MIP, also see section 0189 lines 1-11)

For claim 30, Havarinen et al discloses a carrier medium (see sections 0116-0123), further comprising: that the wirelessly transmitting of the configuration request message

(see Figure 2, MT sends registration request to the PAC, which is part of the MIP, see section 0189 lines 1-11)

For claim 44, Havarinen et al. teach an apparatus in first a station (see Figure 1, reference sign MIP interconnected with GAGW and HAAA, and section 0172 lines 1-5) of a wireless network (see section 0172 and section 0163 lines 3-5), the apparatus comprising: a wireless transceiver (see section 0178 lines 1-4 and section 0182, FAAA, which is part of the MIP can send a receive/transmit, see section 0172 for wireless) and able to wirelessly transmit and wirelessly receive messages to and from (see section 0178 lines 1-4 and section 0182, FAAA, which is part of the MIP can send a receive/transmit, see section 0172 for wireless) another wireless station (see Figure 1, reference character MT and section 0171 lines 4-6); .

a processor (see section 0174 lines 5-7) coupled to the to respond to cause the transceiver to wirelessly transmit a discovery message (see section 0237, FA is another name for PAC which is part of the MIP),

in the case that a configuration request message (see Figure 2, MT sends registration request to the PAC, which is part of the MIP) is received from a second wireless station (see Figure 1, reference character MT and section 0171 lines 4-6), the processor (see section 0077) further:

to generate a configuration data message (see Figure 2, section 0180 and 181) for the second wireless station (see section 0182, sends to MT) including one or more configuration parameters for the second wireless station (see section 0180); and

to cause the transceiver to transmit the configuration data message to the second wireless station (see section 0182),
such that the second wireless station can be configured (see section 0187).

For claim 51, Tada et al. teach wherein the means for wirelessly transmitting a configuration request transmits (see Figure 2, MT sends registration request to the PAC, which is part of the MIP, see section 0189 lines 1-11, thus it has means transmitting request) and wirelessly transmitting a configuration request message to the second wireless station message (see Figure 2, MT sends registration request to the PAC, which is part of the MIP, see section 0189 lines 1-11).

Havarinen et al does not teach:

That the first station sends the request message after it receives the discovery message from a second station as recited in claim 2, 21, 37;

Sending the discovery message at a low RF power as recited in claim 3, 22, 38;

Sending the discovery message in response to user command as recited in claim 5.

Transmission of request message is in response to receiving a discovery message as recited in claim 13, 30, 51.

For claim 44, that the apparatus consist of an antenna.

For claim 47, that the transmitting of the discovery message is based on receiving a command from the user.

For claim 48, that there are one or more selectors that correspond to different configurations.

Tada et al, from the same or similar field of endeavor, teaches the above listed features, as follows:

For claim 2 and 37, Tada et al. teach, wherein the method further comprises: wirelessly transmitting (see column 6 lines 23-25) a discovery message (see column 6 lines 54-56), wherein a message (see column 6 lines 58-60) wirelessly received at the first station is wirelessly transmitted (see Figure 1 and column 2 lines 38-41) by the second wireless station (see column 1 line 50-65) in response to the discovery message being wirelessly received by the second wireless station (see column 6 lines 50-65).

For claim 3 and 38, Tada et al teach, wherein the method further comprises: setting the output RF power level to a relatively low level for the wirelessly transmitting of the discovery message (see column 18 lines 21-23, device detection is performed first at the lowest power level), such that the range of reception of the wirelessly transmitted configuration data message is limited.

For claim 5, Tada et al. teaches a method, wherein the wirelessly transmitting a discovery message (see section 6 lines 54-56) is in response to wirelessly (see Figure 1 and column 2 lines 38-41) receiving a command from a user (see column 16 lines 47-51).

For claim 13, Tada et al teaches a method, further comprising:

wirelessly receiving (see Figure 8 and column 2 lines 38-41) a discovery message from the second wireless station (see column 6 lines 54-56) such that the wirelessly (see Figure 1 and column 2 lines 38-41) transmitting of a message is in response to the receiving of the discovery message (see Column 6 lines 50-65).

For claim 21, Tada et al. teaches a carrier medium (see column 8 lines 4-8), wherein the method further comprises:

wirelessly transmitting (see column 6 lines 23-25) a discovery message (see column 6 lines 54-56),

wherein a message (see column 6 lines 58-60) wirelessly received at the first station is wirelessly transmitted (see Figure 1 and column 2 lines 38-41) by the second wireless station (see column 1 line 50-65) in response to the discovery message being wirelessly received by the second wireless station (see column 6 lines 50-65).

For claim 22, Tada et al teaches a carrier medium (see column 8 lines 4-8), wherein the method further comprises:

setting the output RF power level to a relatively low level for the wirelessly

transmitting of the discovery message (see column 18 lines 21-23, device detection is performed first at the lowest power level), such that the range of reception of the wirelessly transmitted configuration data message is limited.

For claim 30, Tada et al teach a carrier medium (see column 8 lines 4-8) , wherein the method further comprises:

wirelessly receiving (see Figure 8 and column 2 lines 38-41) a discovery message from the second wireless station (see column 6 lines 54-56) such that the wirelessly (see Figure 1 and column 2 lines 38-41) transmitting of a message is in response to the receiving of the discovery message (see Column 6 lines 50-65).

For claim 44, Tada et al teach, that an antenna (see Figure 3 and column 8 lines 26-28 and lines 33-35) that is coupled to a wireless transceiver (see Figure 3, reference character 9).

For claim 47, Tada et al teach a user interface (see Figure 12) wherein the wirelessly transmitting the discovery message (see column 6 lines 54-56) in response to the user interface wirelessly (see Figure 1 and column 2 lines 38-41) receiving a command from a user (see column 16 lines 47-51 and column 16 lines 43-51), such that a user can initiate the configuration (see column 16 lines 43-51).

For claim 48, Tada et al teach wherein the command includes one or more selectors (see Figure 12), each selector corresponding to a set of configuration parameters (see column 16 lines 47-51), and wherein the generating a configuration data message includes configuration parameters from the set of configuration parameters corresponding to the selector (see column 16 lines 55-66).

For claim 51, Tada et al teach An apparatus wherein, sending a message is in response to wirelessly receiving (see Figure 8 and column 2 lines 38-41) a discovery message from the second wireless station (see column 6 lines 54-56), the responding to wirelessly wirelessly (see Figure 1 and column 2 lines 38-41) receiving a discovery message (see Column 6 lines 50-65).

Thus it would have been obvious to one of ordinary skill in the art at the time of invention was made to combine incorporate the discovery message method taught by Tada et al. into the wireless network thought by Havarinen et al. One could have implemented features involving the discovery message, possibly in software, for the apparatus and network taught by Havarinen et al. For example one could have programmed the access points to send a discovery message when they discover a mobile node. The devices in the MIP are capable of accomplishing such a task. Additionally, Havarinen et al teaches that a discovery message can be used in their method (see section 0237), however does not further expand on the idea. Furthermore, it would have been possible to incorporate the method of sending a low-powered discovery signal, via control software and/or circuitry into the access point of the MIP as taught by Havarinen et al.

Additionally, one could have incorporated the antenna into the MIP as taught by Havarinen et al by incorporating additional hardware and circuitry. Finally, the user interface, configuration parameters and the consequent generation of configuration message based on the selection can all be implemented in software.

For claim 2,21, 37 the motivation is that a communication between the mobile terminal and the MIP can be established, in order to provide wireless services.

For claims 3, 22, and 38 the motivation is that one is able to establish the radio link state, between a mobile terminal and a stationary terminal.

For claim 5, the motivation is that the user is given the capability to discover certain mobile stations while excluding others.

For claim 13, 30, and 51 the motivation is once a wireless service providing station has found an eligible mobile terminal, the terminal can send a request in order to establish a connection and /or wireless service.

For claim 44, the motivation would be to provide better reception/transmission of electromagnetic signals.

For claim 47, the motivation is that the user is provided with an interface where he/she can make selection on the connection configurations.

For claim 48, the motivation is that the user is provided with an interface where he/she can make selection on the connection configurations.

10. Claim 8-10, 17-19, 26, 27, 34, 35, 42, 43, 55, 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havarinen et al (US 2002/0012433 A1), in view of Grobler et al (US 2005/0048997).

Havarinen et al teaches all the claimed invention as described in paragraph 6. Havarinen et al does not teach:

802.11 standards as recited in claim 8, 18, 26, 34, 42, 55;

security key as recited in claim 9, 17;

WEP key as recited in claim 10, 19, 27, 35, 43, 56;

Grobler et al, from the same or similar field of endeavor, teaches the above listed features.

For claim 8, 18, 26, 34, 42, 55, Grobler et al teaches, wherein the wireless network (see Figure 1 and section 0012 lines 1-3) substantially conforms to one of the IEEE 802.11 standards or a derivative thereof (see section 0029 lines 3-10).

For claim 9 and 17, Grobler et al teaches a method, wherein the configuration parameters (see section 0011 lines 1-3) includes a security key (see Table 8 under “WEP” and “WEP keys” and Table 6 under “Security”, a WEP key is a security key).

For claim 10, 19, 27, 35, 43, 56, Grobler et al teaches, wherein the configuration parameters (see section 0011 lines 1-3) includes a WEP key (see Table 8 under “WEP” and “WEP keys” and Table 6 under “Security”).

Thus it would have been obvious to one of ordinary skill in the art at the time of invention was made to include the 802.11 standard, security and WEP key into the network as taught by Havarinen et al. The devices in the network as taught by Havarinen et al. are programmable, thus it would be possible to implement the 802.11 standard, security and WEP via software.

The motivation for claims 8,18,26, 34,42, 55 is that if the network and the devices comply with 802.11 standards one is able to apply that network architecture to a wide variety of devices that comply with 802.11, making it diverse.

The motivation for claims 9,17 is that if a security key is included, it makes the connection secure, preventing unauthorized access to information or service.

The motivation for claims 10, 19, 27, 35, 43, 56 is that if a WEP key is included, it makes the connection secure, preventing unauthorized access to information or service.

11. Claim 15, 32, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havarinen et al (US 2002/0012433 A1), in view of Smetters et al (US 2004/0266449 A1).

For claims 15, 32, and 53, Havarinen et al teach all the claimed invention as disclosed in paragraph 6. Havarinen et al do not teach that the request message is sent in response to a command from the user as recited in claim 15 and 32. Smetters et al, from the same or similar field of endeavor, teaches wherein the wirelessly transmitting a configuration request message (see section 0074 lines 6-12) is in response to wirelessly receiving a command from a user (see section 0074 lines 6-12). Thus it would have been obvious to

one of ordinary skill in the art at the time of invention was made to incorporate the method taught by Smetters et al into the network or Havarinen et al. Here one could have programmed the mobile terminal as taught by Havarinen et al to send a configuration request message when the user initiates it with a command on the terminal. The motivation is that it enables the user to have a choice when to establish a connection.

12. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Havarinen et al (US 2002/0012433 A1) and Tada et al (US 7,184,707 B2), further in view of Dwornik (US 2003/0003860 A1):

Havarinen et al and Tada et al teach all the claimed invention as described in paragraph 10. Havarinen et al and Tada et al do not teach an antenna, a variable attenuator, and transceiver. Dwornik from the same or similar field of endeavor, teaches a variable attenuator (see Figure 1A, reference characters 1202 and column 0024 lines 21-22) between the antenna (see Figure 1B, reference characters 101 and see section 0019 lines 3-9) and the transceiver (see Figure 1A, reference character 100, see section 0019 lines 3-9, a modem is a Transceiver). Thus it would have been obvious to one of ordinary skill in the art at the time of invention was made to include antenna, a variable attenuator, and transceiver into the devices of the MIP as taught by Havarinen et al. One could have implemented those components via additionally hardware and circuitry into the access points which are part of the MIP. The motivation is that one is able to control the reception/transmission of electromagnetic signals better.

13. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Havarinen et al (US 2002/0012433 A1) and Tada et al (US 7,184,707 B2), further in view of Grzeczkowski (US 2003/0143946 A1):

Havarinen et al and Tada et al teach all the claimed invention as described in paragraph 10. Havarinen et al and Tada et al do not teach a user interface for providing status information. Grzeczkowski, from the same or similar field of endeavor, teaches a display that communicates the status of the configuration sequence to a user (see section 0010 lines 1-10). Thus it would have been obvious to one of ordinary skill in the art at the time of invention was made to incorporate a display that show the status into one of the devices in the MIP, GAGW or HAAA as taught by Havarinen et al. Those devices comprise of server which are capable to connect to display devices. Thus one could implement, via software, a program that shows the status of the configuration. The motivation is that the user/administrator is able to diagnose if /where a fault occurs.

Allowable Subject Matter

14. Claim 4 and 39 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

X. 15. Claim 4 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

X. 16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-2001/0014593 A1	MCCUNE, EARL
US-2003/0005290 A1	Fishman et al.
US-2003/0035545 A1	Jiang, Sam Shiaw-Shiang
US-2004/0082327 A1	Kim et al.
US-6,775,559 B1	Weghorst et al.
US-6,788,959 B2	Jokinen et al.
US-2004/0198319 A1	Whelan et al.
US-2005/0048963 A1	Kubler et al.
US-2005/0101340 A1	Archiable, Donald Paul
US-7,003,295 B1	Cook et al.
US-7,133,526 B2	Whelan et al.

The references are cited to show network and methods for connection establishment and authentication.

X. 17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenan Cehic whose telephone number is (571) 270-3120. The examiner can normally be reached on Monday through Friday 7:30AM to 5:00PM (EST).

Art Unit: 2609

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on (571) 272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KC

Dang T. Ton
DANG T. TON
SUPERVISORY PATENT EXAMINER